REMARKS/ARGUMENTS

At the outset, the Examiner is thanked for the thorough review and consideration of the subject application. The Final Office Action of November 6, 2002 has been received and contents carefully reviewed.

By the Amendment, Applicants cancel claims 21-34, 39 and 40, and add new claims 41-56. Accordingly, claims 41-56 are currently pending in the present application. Reexamination and reconsideration of the application, as amended, in view of the following remarks are respectfully requested.

In the Office Action dated November 6, 2002, the Examiner rejected claims 21-34, 39 and 40 based on statutory double patenting under 35 U.S.C. § 101; rejected claims 31-32 under 35 U.S.C. § 112, second paragraph; rejected claims 21-34 and 39-40 under 35 U.S.C. § 103(a) as being unpatentable over Yamaguchi et al. (U.S. Patent No. 5,897,346). Applicants respectfully traverse these rejections.

Applicants hereby cancel claims 21-34 and 39-40. Therefore Applicants submit that the rejection of claims 21-34, 39 and 40 based on statutory double patenting under 35 U.S.C. § 101 and the rejection of claims 31-32 under 35 U.S.C. § 112, second paragraph, are moot. In addition, Applicants respectfully ask the Examiner to review the new claims 41-56 in view of the following remarks.

Applicant respectfully submits that independent new claims 41 and 55 are allowable over the cited art in that claims 41 and 55 recite a combination of elements including, for example "wherein the activation of said impurity ions occurs as the step of said implanting impurity ions is performed." None of the cited references including Yamaguchi et al. teaches or suggest at least these features of the claimed invention.

Applicants have carefully reviewed the Examiner's arguments reflecting thorough review and consideration of the subject application. In the Office Action dated November 6, 2002 at page 5, the Examiner stated, "it is noted that Applicants' and Yamaguchi perform the same steps for the same purposes..." The Applicants respectfully disagree with the Examiner's proposition for the following reasons. The Specification of the instant applications discloses "the object of the present invention is to provide a method of fabricating a TFT including the step of simultaneously forming an impurity region for a source and a drain region and the step of implanting and activating the impurity ions in such impurity region." See p3, lines 27-31 of the present application. However, Yamaguchi et al. states, "the object of the present invention is to provide a method for lowering the level (related with dangling bonds) in thin film silicon semiconductor." See Yamaguchi et al. col 2, lines 5-8. Yamaguchi et al. further states, "the implantation of hydrogen, chlorine, or fluorine ions, with the insulating film formed on the silicon semiconductor film, neutralizes dangling bonds of silicon in the silicon semiconductor and reduces an interface level at the interface..." See Yamaguchi et al. col 4, lines 7-14. Therefore, Applicant respectfully submits that the object of the implantation of hydrogen, chlorine, or fluorine ions in Yamaguchi et al. is different from that of the present application.

Furthermore, Applicant respectfully submits that the Examiners' citation of Yamaguchi et al. actually teaches away from the teaching of the present application. First of all, the applicant respectfully submits that the implantation step of hydrogen, chlorine, or fluorine ions always accompanies a post heat treatment to neutralizes dangling bonds of silicon in the silicon semiconductor, reduces an interface level at the interface, and activate the Souce/Drain doping impurities, *the post heat treatment step that the instant application is trying to eliminate to simplify a fabrication process of TFTs* [italics added]. See, for example, Yamaguchi et al. col 6, lines 63-67 ("in all the cases, ...). Secondly, the possibility of using chlorine ions (atom number 17) in Yamaguchi et al. would undesirably change the principle of operation of the present application, since the Specification of the present application states "as the size of the hydrogen particle is significantly small, the excited region is not damaged by the collision with implanted hydrogen particles." See p6, lines 24-26 of the present application. Accordingly, the teachings of the references are not sufficient to render the claims prima facie obvious. Applicant respectfully

submits that no proper motivation or suggestion is found in Yamaguchi et al. for one of ordinary skill in the art to arrive at the claimed invention.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

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Respectfully submitted,

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